## Job Description and Selection Criteria

| Post | Savilian Professorship of Geometry |
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| Department/Faculty | Mathematical Institute |
| Division | Mathematical, Physical and Life Sciences |
| College | New College |

## Overview of the post

The Mathematical Institute and New College intend to appoint to the Savilian Professorship of Geometry with effect from 1 September 2025 or as soon as possible thereafter.

The Savilian Professorship of Geometry is at the heart of Oxford's continuing tradition of excellence in mathematics. The successful candidate will be a research mathematician in Geometry or some other branch of Pure Mathematics of the highest international calibre, and contribute to the department's teaching. This post will become available following the retirement of the current postholder, Frances Kirwan. The Savilian Professorship has a distinguished history that also includes other eminent mathematicians such as J.J. Sylvester, G.H. Hardy, Michael Atiyah and Richard Taylor among the previous holders of the chair. The department welcomes applications from truly exceptional candidates who might not describe themselves primarily as geometers.

You will join Oxford's world-leading Mathematical Institute, which in the last two REF (Research Excellence Framework) exercises in 2021 and 2014 has been ranked first in the UK, and which is housed in the stunning Andrew Wiles Building in the heart of the University's new Radcliffe Observatory Quarter.

This post is a statutory professorship, which is the most senior academic grade at Oxford. Statutory professors have a world-leading research reputation and exercise broad academic leadership across their department and college, and more widely in their subject at national and international level. Please see https://hr.admin.ox.ac.uk/academic-posts-at-Oxford for a description of the different types of academic posts at Oxford.

You will, in addition to the departmental appointment, be elected to a non-stipendiary fellowship at New College where you will sit on the College's Governing Body.

If you would like to discuss this post, please contact Professor James Sparks, Head of the Mathematical Institute on head-of-dept@maths.ox.ac.uk. All enquiries will be treated in strict confidence and will not form part of the selection decision.


## Duties of the post

You will be a member of both the University and the College community. You will be part of a lively and intellectually stimulating research community which performs to the highest international levels in research and publications and will have access to the excellent research facilities which Oxford offers. You will have a role to play in the running of the College as a member of the Governing Body and a trustee of the College.

The main duties of the post are as follows:

## Research

- engage in original research of the highest calibre in the field of geometry or some other branch of Pure Mathematics;
- disseminate research through publication in scholarly journals, participation in international conferences and seminars, and in other ways as appropriate;


## Academic Leadership and Funding

- provide research leadership within your own research area and more widely in the Mathematical Institute;
- secure research funding and engage in the management of research projects;


## Teaching and Examining

- carry out teaching at undergraduate and graduate level, including lectures (which may not be exclusively in your area of research expertise), classes, and project supervision. The requirement will normally be to give not fewer than thirty-six lectures (or equivalent) in each academic year by agreement with the Head of the Mathematical Institute;
- supervise Doctoral and Masters students, and postdoctoral research associates;
- take part in University examining both for undergraduate and graduate students as and when requested to do so.


## Pastoral Duties

- Act as a Graduate/College Advisor to graduate students studying Mathematics at New College;


## Administration

- participate in the administration of the department as and when requested by the Head of the Mathematical Institute;
- act as Head of the Mathematical Institute if requested to do so by the divisional board;
- participate in College life and governance, including fulfilling duties as a Trustee of the College, attending - and on occasion giving - lectures and talks, and attending special dinners.


## Headship of Department

Every professor who is employed by the University, unless individually exempted, has an obligation to accept headship of the department or faculty in which their post is held, if invited to do so by the divisional board.

## Selection criteria

Your application will be judged only against the criteria which are set out below. You should ensure that your application shows clearly how your skills and experience meet these criteria.

The University is committed to fairness, consistency and transparency in selection decisions. Members of electoral boards (selection committees) will be aware of the principles of equality of opportunity, fair selection and the risks of bias. There will be both female and male board members wherever possible.

If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the electoral board will take this into account, recognising that the quantity of your research may be reduced as a result.

You will demonstrate the following:

- a proven record of original research of the highest quality in Geometry or some other branch of Pure Mathematics, as evidenced by, for example, publications in internationally refereed journals;
- the ability to provide research leadership and direction in a major field of Geometry or some other branch of Pure Mathematics ;
- a proven record of securing research funding, and the potential to do so in the future;
- evidence of contributions to research strategy, leadership and direction outside the area of your speciality;
- the ability and willingness to communicate and disseminate your research, as evidenced by, for example, invitations to and participation in conferences, seminars and workshops;
- experience of supervising graduate students and directing postdoctoral researchers;
- evidence of effective and innovative teaching, in particular in undergraduate and graduate lectures;
- evidence of the ability to communicate effectively with a wide range of people, including College staff, students, and early-, mid- and established-career academics in mathematics and other subjects;
- experience of academic administration and a willingness to undertake the full range of administrative duties in the department;
- the ability and willingness to contribute positively to the governance of the college.


## How to apply

To apply, visit https://my.corehr.com/pls/uoxrecruit/erq_iobspec details form.jobspec?p id=166302 then click on the Apply Now button on the 'Job Details' page and follow the on-screen instructions to register as a new user or log-in if you have applied previously. Please refer to the "Terms of Use" in the left-hand menu bar for information about privacy and data protection. Please provide details of three referees and indicate whether the University may contact them without seeking your permission. Referees should not write directly to the University, but may be contacted at any stage in the recruitment process if the electoral board requests your references.

You will also be asked to upload a CV and a supporting statement. The supporting statement should explain how you meet the selection criteria for the post using examples of your skills and experience. This may include experience gained in education or employment, or during career breaks (such as time out to care for dependants).

The University and colleges welcome applications from candidates who have a disability or long-term health condition and is committed to providing long term support. The University's disability advisor can provide support to applicants with a disability, please see https://edu.admin.ox.ac.uk/disability-support for details. Please let us know if you need any adjustments to the recruitment process, including the provision of these documents in large print, audio or other formats. If we invite you for interviews, we will ask whether you require any particular arrangements at the interview. The University Access Guide gives details of physical access to University buildings https://www.accessguide.ox.ac.uk/.

Please upload all documents as PDF files with your name and the document type in the filename.
All applications must be received by $\mathbf{1 2 . 0 0}$ noon UK time on Monday 26 February 2024.
Please email recruitment.support@admin.ox.ac.uk should you experience difficulties using the online application system. Further help and support is available from https://hrsystems.admin.ox.ac.uk/recruitmentsupport. To return to the online application at any stage, please log back in and click the "My applications" button on the left hand side of the page.

You will be notified of the progress of your application by automatic emails from our e-recruitment system. Please check your spam/junk mail regularly to ensure that you receive all emails.

All applications will be considered by the electoral board as soon as possible after the closing date. The electoral board is free to search for other candidates at this or any subsequent stage in its proceedings. You will be kept informed of the progress of your application at each stage, but in some cases there may be a delay while deliberations are ongoing. All shortlisted candidates will be interviewed and will be asked to give a short presentation to the electoral board as part of the interview. The composition of the electoral board will be published in the University Gazette (https://gazette.web.ox.ac.uk/) when it is finalised.

## The Mathematical Institute

The Savilian Professorship of Geometry is a cornerstone of Oxford's commitment to fundamental research in mathematics. The holder of the Chair must be a research mathematician of the highest international calibre.

This Professorship is one of a number of Statutory Chairs in the Mathematical Institute. The holders of these Chairs are expected to provide research leadership for the Institute.

The Mathematical Institute, as Oxford's Department of Mathematics is known, is one of the leading mathematics departments in the world. Our mathematical research, impact and environment have twice been ranked first in the UK in the 2021 and 2014 Research Excellence Framework exercises, a government review of research in all UK universities. The Mathematical Institute is the focus of research into both fundamental mathematics and its applications, and our inclusive nature and overall size are key factors in the provision of an outstanding research environment for our members. The large number of faculty, postdocs and students in the Mathematical Institute, all supported by excellent facilities, allows us to maintain a critical mass in research groups encompassing a wide spectrum of mathematics, while our integrated nature fosters collaboration between fields. We also host a large number of academic visitors. Our web pages (www.maths.ox.ac.uk/) provide comprehensive information about all of our activities.

The research activities of the Institute as a whole can be gauged from the web pages of the research groups within the Institute (www.maths.ox.ac.uk/research). The range of our research interests is well reflected by the profile of our faculty as listed at www.maths.ox.ac.uk/people. Many members of the Institute have received prestigious prizes and other special recognition for their work; some recent examples can be found
at www.maths.ox.ac.uk/news. The Department also enjoys several links with prominent researchers in the Department of Statistics, which houses a research group specialising in Probability -https://www.stats.ox.ac.uk/research/research-groups/probability/.

The Mathematical Institute moved into the purpose-built Andrew Wiles Building in the University's Radcliffe Observatory Quarter in September 2013. As well as providing offices for all staff and graduate students, it houses a range of other facilities available to members of the department, including the Whitehead Library, a large range of meeting rooms, teaching spaces, lecture rooms, and social spaces, and a small laboratory for carrying out table-top experiments. For more information, see http://www.maths.ox.ac.uk/about-us.

Teaching is central to the life of the Mathematical Institute and we have an annual intake of approximately 300 undergraduates, some on courses taught jointly with other departments. We admit about 200 students each year across five taught masters' degree courses and have over 250 doctoral students in residence at any one time. Our doctoral programme attracts the best research students from across the world, and we have a broad mentoring and training programme.

The Mathematical Institute strives to ensure that all staff and students are given the opportunities and support they need to achieve their potential. We are committed to equality of opportunities and to advancing women's careers. We support staff returning from long-term absence with teaching relief, offer flexible working arrangements, and the department sponsors University nursery places to support the priority allocation of childcare to our staff. Further information about family support can be found in the Standard Terms and Conditions. Our Equality, Diversion and Inclusion (EDI) Committee contributes to many aspects of our work, see: https://www.maths.ox.ac.uk/members/equality-diversity-inclusion.

As part of the department's commitment to openness, inclusivity and transparency, we strongly encourage applications from all who consider that they meet the requirements of the position, and particularly from women and Black, Asian and minority ethnic candidates who are under-represented in positions of this type at Oxford.

We have a number of family-friendly policies, such as the right to apply for flexible working, hybrid working, and support for staff returning from periods of extended absence. We are committed to ensuring an inclusive interview process and will reimburse up to $£ 250$ towards any additional care costs (for a dependent child or adult) incurred as a result of attending an interview for this position.

The Mathematical Institute holds a silver Athena SWAN award to recognise advancement of gender equality: representation, progression and success for all.

## The Mathematical, Physical, and Life Sciences Division

The Mathematical, Physical, and Life Sciences (MPLS) Division is one of the four academic divisions of the University. Oxford is widely recognised as one of the world's leading science universities and the MPLS Division is home to our non-medical sciences, with 9 academic departments that span the full spectrum of the mathematical, computational, physical, engineering and life sciences, undertaking both fundamental research and cutting-edge applied work. Our research tackles major societal and technological challenges - whether developing new energy solutions or improved cancer treatments, understanding climate change processes, or helping to preserve biodiversity - and is increasingly focused on key interdisciplinary issues. We collaborate closely with colleagues in Oxford across the medical sciences, social sciences and humanities, as well as with other universities, research organisations and industrial partners across the globe in pursuit of innovative research geared to address critical and fundamental scientific questions.

The disciplines within the MPLS Division regularly appear at the highest levels in world rankings, including the Times Higher Education and QS world rankings. Nationally, the quality of the Division's research outputs and environment, and the resulting impact, was recognised through strong performances in the UK Research Excellence Framework in both 2014 and 2021. MPLS is proud to be the home of some of the most creative and innovative scientific thinkers and leaders working in academia. Our senior researchers have been awarded some of the most significant scientific honours, and we have a strong tradition of attracting and nurturing the very best early career researchers who regularly secure prestigious fellowships and faculty positions. MPLS continues in its work to support diversity in its staffing, seeing that it will bring benefits to everyone. All academic departments in the Division hold Athena Swan Awards.

We have around 7,300 full and part-time students (including approximately 3,400 graduate students) and play a major role in training the next generation of leading scientists. Oxford's international reputation for excellence in teaching is reflected in its position at the top of the major league tables and subject assessments. MPLS academics educate students of high academic merit and potential from all over the world. Through a mixture of lectures, practical work and the distinctive college tutorial system, students develop their ability to solve diverse mathematical, scientific and engineering problems.

MPLS is dedicated to bringing the wonder and potential of science to the attention of audiences far beyond the world of academia. We have a strong commitment to supporting public engagement in science through initiatives including the Oxford Sparks portal (https://www.oxfordsparks.ox.ac.uk) and a large variety of outreach activities; these are crucial activities given that so many societal and technological issues demand an understanding of the science that underpins them. We also bring the potential of our scientific efforts forward for practical and beneficial application to the real world and our desire, aided by the work of Oxford University Innovation and Oxford Sciences Innovation, is to link our best scientific minds with industry and public policy makers.

For more information about the MPLS division, please visit: www.mpls.ox.ac.uk

## New College

There are 39 self-governing and independent colleges at Oxford, giving both academic staff and students the benefits of belonging to a small, interdisciplinary community as well as to a large, internationally-renowned institution. The collegiate system fosters a strong sense of community, bringing together leading academics and students across subjects, and from different cultures and countries.

Founded in 1379, New College is one of the oldest and largest of the colleges of the University of Oxford. The colleges are independent, self-governing establishments which function both as academic institutions and as social and residential centres for students. New College currently has approximately 440 undergraduate and 370 graduate students, studying most of the subjects offered by the University of Oxford.

Undergraduate teaching at New College is organised and provided by around 38 Tutorial Fellows (nearly all of whom also hold University posts), assisted by some 30 Stipendiary Lecturers (college tutors employed on a fixed-term basis). There are also 14 Professorial Fellows and, at any one time, around 15 Junior Research Fellows. All these categories are members of the Senior Common Room, which provides dining and social benefits. Governing Body, which has overall responsibility for all aspects of the running of the College, comprises the Warden (the Head of the College) together with the Official Fellows (the Tutorial, Professorial and Supernumerary Fellows).

New College has a strong tradition in Mathematics. There are Tutorial Fellows in Applied Mathematics (Professor Andy Wathen) and Pure Mathematics (Professor Victor Flynn). A Supernumerary Fellow, Professor David Gavaghan, has research interests in applications of computational mathematics in biology, and holds a Professorial Fellowship at the College.

There are approximately 30 undergraduates studying for degrees in Mathematics, Mathematics \& Computer Science, Mathematics \& Philosophy, Mathematics \& Statistics and Computer Science. The college attracts a very high standard of applicant, and around 19 students reading for the higher degrees of MSc or DPhil.

For more information please visit: https://www.new.ox.ac.uk/

## About the University of Oxford

Oxford's departments and colleges aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.
Oxford's self-governing community of international scholars includes Professors, Associate Professors, other college tutors, senior and junior research fellows and a large number University research staff. Research at Oxford combines disciplinary depth with an increasing focus on inter-disciplinary and multi-disciplinary activities addressing a rich and diverse range of issues. The current strategic plan can be found at http://www.ox.ac.uk/about/organisation/strategic-plan-2018-23.
Oxford's strengths lie both in empowering individuals and teams to address fundamental questions of global significance, and in providing all staff with a welcoming and inclusive workplace that supports everyone to develop and do their best work. Recognising that diversity is a great strength, and vital for innovation and creativity, Oxford aspires to build a truly inclusive community which values and respects every individual's unique contribution.

While Oxford has long traditions of scholarship, it is also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities. It consistently has the highest external research income of any university in the UK (the most recent figures are available at www.ox.ac.uk/about/organisation/finance-and-funding), and regularly creates spinout companies based on academic research generated within and owned by the University. Oxford is also recognised as a leading supporter of social enterprise.

Oxford admits undergraduate students with the intellectual potential to benefit fully from the small group learning to which Oxford is deeply committed. Meeting in small groups with their tutor, undergraduates are exposed to rigorous scholarly challenge and learn to develop their critical thinking, their ability to articulate their views with clarity, and their personal and intellectual confidence. They receive a high level of personal attention from leading academics.

Oxford has a strong postgraduate student body who are attracted to Oxford by the international standing of the faculty, by the rigorous intellectual training on offer, by the excellent research and laboratory facilities available, and by the resources of the museums and libraries, including one of the world's greatest libraries, the Bodleian.

For more information please visit www.ox.ac.uk/about/organisation.

## University Benefits, Terms and Conditions

## Standard duties

The Professor shall undertake research, lecture and give instruction in Geometry, or some other branch of Pure Mathematics.

It is expected that professors will generally participate in the business and affairs of the relevant faculty or department.

## Salary

Your salary will be determined after appropriate consultation. There is an annual 'cost-of-living' review. In addition you will be eligible for consideration, in regular reviews, for Professorial Merit Pay.

An additional pensionable allowance will be payable in respect of any period during which you are Head of Department/Faculty Board Chair. (Any allowance payable for a period of less than three years will not, however, be pensionable.)

## Pension

The University offers generous pension provision. You will be offered membership of the Universities Superannuation Scheme.

Details are available at https://finance.web.ox.ac.uk/uss.

## Sabbatical leave

You will be eligible for sabbatical leave to allow you to focus on your research. In general, one term of leave is available for each six terms worked. This leave may either be taken as one term of leave after 6 terms of service, or accumulated and taken as one year of leave after 6 years of service.

## Outside commitments

You may apply to spend up to 30 working days in each year on projects outside your employment duties, such as consultancy, spin-out activity and membership of research councils and other bodies. There is no limit to earnings from these activities without deduction from salary. Details of the approval process may be found at https://hr.admin.ox.ac.uk/holding-outside-appointments.

Guidance is also available on:
ownership of intellectual property
https://governance.admin.ox.ac.uk/legislation/council-regulations-7-of-2002
managing conflicts of interest
https://researchsupport.admin.ox.ac.uk/governance/integrity.

## Membership of Congregation

Oxford's community of scholars governs itself through Congregation which is its "parliament". You will be a voting member of Congregation.

See https://www.ox.ac.uk/about/organisation/governance and https://governance.admin.ox.ac.uk/legislation/statute-iv-congregation for further details.

## Residence

You will be required to reside within the University (i.e. within twenty-five miles of Carfax, the central point of Oxford) during at least six months in each academic year, between 1 October and 1 August, and in particular during not less than six weeks of each term.

## Housing

You may be eligible for assistance with housing: some rental accommodation is available for statutory professors moving to Oxford for their first year, and there is a Joint Equity Scheme which new statutory professors may be entitled to join, to help with the purchase of a home in Oxford.

General information about home rental and purchase is available at
https://welcome.ox.ac.uk/housing.

## Relocation

Subject to UK tax regulations and the availability of funding, a relocation allowance may be available.

## Family support

The University offers generous family leave arrangements, such as maternity, adoption, paternity and shared parental leave. Details are available at https://hr.admin.ox.ac.uk/family-leave-for-academic-staff. You will have considerable flexibility in the day-to-day organisation of your duties. Requests for flexible working patterns will be accommodated as far as possible.

You will be eligible to apply to use the University nurseries (subject to availability of places). For details of the nurseries and how to apply for places, please see https://childcare.admin.ox.ac.uk/home.

The University subscribes to Work and Family Space, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, online support and informative webinars in addition to the ability to book emergency childcare through their online service Bubble. For more details, please see https://hr.admin.ox.ac.uk/my-family-care.

The Oxford University Newcomers' Club is run by volunteers, whose aim is to help the newly-arrived partners of visiting scholars, of graduate students and of newly appointed academic and administrative members of the University to settle in and to give them opportunities to meet people in Oxford. Further information is available at https://www.newcomers.ox.ac.uk/.

## Welcome for International Staff

One of Oxford's great strengths is its truly international body of research and teaching staff from over 140 countries, and we welcome applications from academics across the world. We can help international staff and partners/families make the transition to Oxford. Information about relocation, living and working in the UK and Oxford is available at welcome.ox.ac.uk.

If you require a Global Talent visa, we have a dedicated Staff Immigration Team to support successful applicants through the immigration process from job offer through to arrival in the UK, subject to the eligibility criteria being met. Further information is available at https://www.gov.uk/global-talent.

## Promoting diversity

The University is committed to recruiting and retaining the best people, whoever they are, to ensure equality of opportunity. The Vice Chancellor's Diversity Fund provides resources for innovative projects to promote diversity.

The Equality and Diversity Unit promotes good practice across the University by developing policies and offering training, and runs a range of support networks for staff. It works closely with Colleges, the Oxford University Student Union and external campaign groups.

Please see https://edu.admin.ox.ac.uk/home for details.

Other benefits and discounts for University employees

The University has a range of facilities and benefits for its staff, including discounted health insurance, sustainable travel schemes, and discounts in local shops and restaurants. Details are available at:

## https://hr.admin.ox.ac.uk/staff-benefits

https://hr.admin.ox.ac.uk/discounts

## Pre-employment screening

Your appointment would be subject to the University's standard pre-employment screening, as applicable to the post. If you are offered the post, you will be asked to provide proof of your right-to-work, your identity, and we will contact the referees you have nominated. You will also be asked to complete a health declaration (so that you can tell us about any health conditions or disabilities so that we can discuss appropriate adjustments with you), and a declaration of any unspent criminal convictions.

We advise you to read the notes for applicants at https://iobs.ox.ac.uk/pre-employment-check.

## Length of appointment

The University operates an employer justified retirement age for academic posts. The retirement date is the 30 September immediately preceding the 70th birthday.

The justification for this may be found at https://hr.admin.ox.ac.uk/the-ejra

For existing employees, any employment beyond the retirement age is subject to approval through the EJRA procedures. Further details can be found at https://hr.admin.ox.ac.uk/the-ejra

## Equality of Opportunity

Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. No applicant or member of staff shall be discriminated against because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

## Data Privacy

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information,
please see the University's Privacy Notice for Job Applicants at: https://compliance.admin.ox.ac.uk/iob-applicant-privacy-policy.

The University's Policy on Data Protection is available at: https://compliance.admin.ox.ac.uk/data-protection-policy.

## College Benefits

As a Professorial Fellow of New College, you will be entitled to the following (all figures at current rates):

- a Fellowship Allowance ( $£ 3,738$ p.a.), which is taxable and pensionable
- an Entertainment Allowance for Fellows acting as Graduate Advisors (£175 p.a.)
- a Research and Book Allowance ( $£ 1,995$ p.a.). Reimbursement for the costs of books, research, and entertainment is made on the presentation of appropriate invoices and receipts
- free lunches and dinner at the common table when available

There is optional membership of a medical insurance scheme at the member's cost.
The Professorial Fellowship at New College is tied to the Savilian Professorship of Geometry, so if you cease to hold the Professorship, the college fellowship must also be vacated.

